

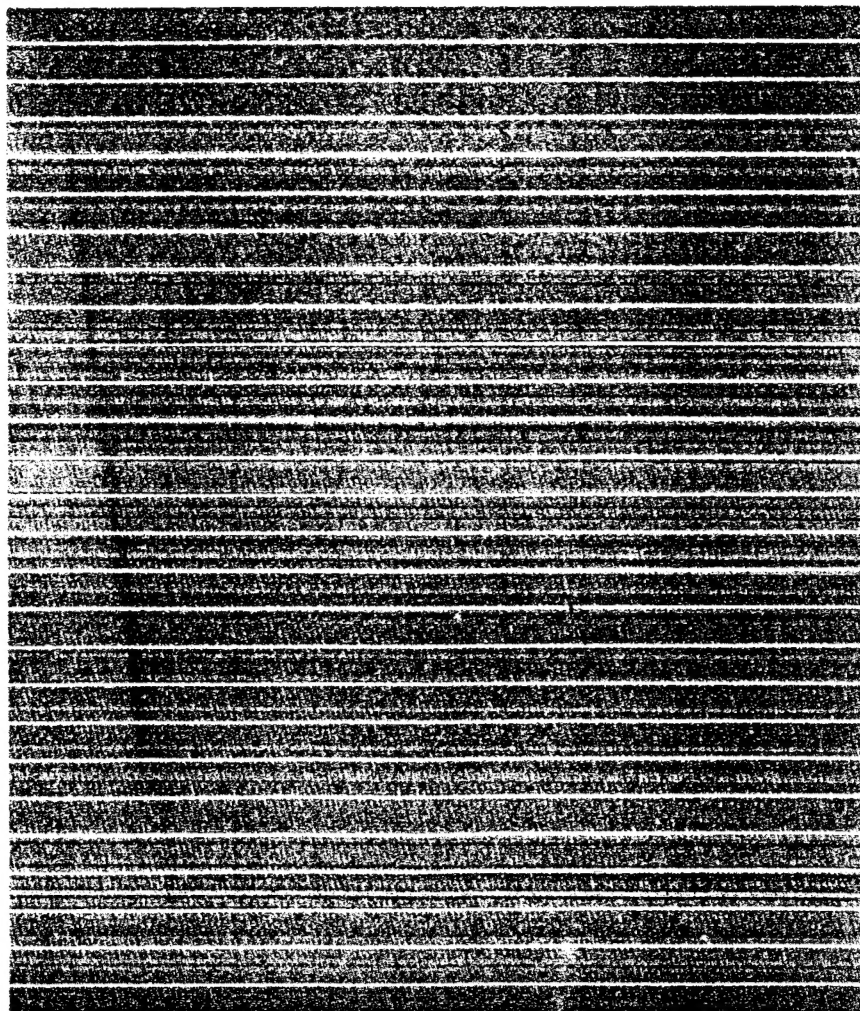
CLATRONIC

CD 184

SERVICE MANUAL

TCD-4070

COMPACT DISC PLAYER



J. GLASBERG
Technischer Kundendienst
HiFi - TV - Video - Camcorder - SAT - Fax
und SCHALTUNGEN
Boschweg 13 - 12057 Berlin
Tel. 030 - 684 20 61 - 64 - Fax 030 50 31

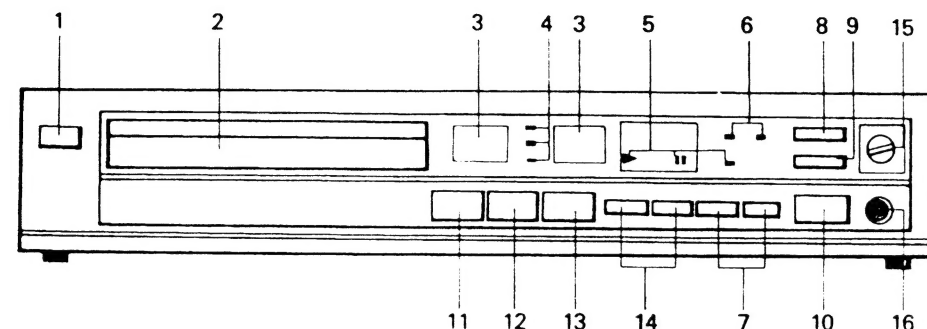
MODEL NO.
TCD-4070
COMPACT DISC PLAYER

CONTENTS

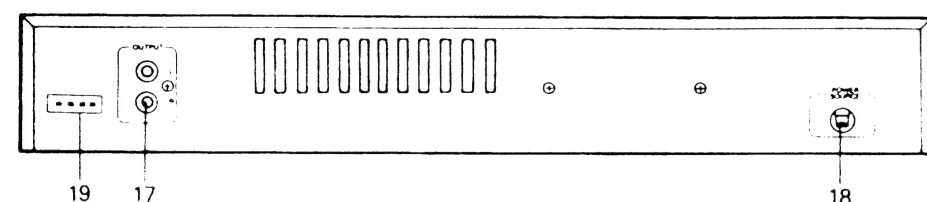
FEATURE OF FIGURE	4
OPERATION OF EACH FUNCTION AND CONTROLS	5
TROUBLESHOOTING GUIDE	8
SPECIFICATIONS.....	8
TEST POINT LOCATION	10
ADJUSTMENT PROCEDURES	11
BLOCK DIAGRAM	14
SCHEMATIC DIAGRAM	15
WIRING DIAGRAM	16
PCB LAYOUT	17
EXPLODED VIEW	18
PART LIST ELECTRICAL PARTS.....	19
PART LIST MECHANICAL PARTS	25

FEATURE OR FIGURE

(FRONT)



(REAR)



- | | |
|------------------------------|---------------------------|
| 1. Power Switch | 10. Display Select Button |
| 2. Disc Tray | 11. Open/Close Button |
| 3. Display Counters | 12. Play/Pause Button |
| 4. Display Mode Indicators | 13. Stop Button |
| 5. Operation Mode Indicators | 14. Skip Button |
| 6. Repeat Indicators | 15. Headphone Volume |
| 7. Search Button | 16. Headphone Jack |
| 8. Repeat Button | 17. Output Jack |
| 9. Memory Button | 18. Power Source |
| | 19. Remote Jack |

OPERATION OF EACH FUNCTION AND CONTROLS

This section briefly describes each control. For a step by step explanation of each function, see OPERATION section in this booklet.

CAUTION:

If this disc player should interfere with your tuner, switch off the disc player during tuner operation.

1. POWER SWITCH

Push in the POWER switch then supplies AC power to the CD player.

2. DISC TRAY

To open or to close the disc tray, push the OPEN/CLOSE button. You may close the disc tray by gently pushing front of the tray.

3. DISPLAY COUNTERS

Shows any one of the following selected display modes:

• PLAY Mode

The TRACK/INDEX indicator will light. The left counter displays the number of the selection being played and the right counter displays the index number for parts within selections (movements in classical music, etc.).

• Elapsed Time Mode

The MINUTE/SECOND indicator will light. The counters display the time for each selection in minutes and seconds.

• Memory Play Mode

The (Track/Memory No.) indicator will light. The left counter displays the number of the programmed play and the right counter displays the number of the selection being played.

NOTE:

This mode will be indicated only if one of more selections are programmed. These counters also indicate the following letterings and numbers.

disc Shows that there is no disc in the tray, or the disc is inserted upside down.

OPEN Shows that the disc tray is opening.

--- Shows that the disc tray is closing.

00 Shows that the unit is in the stop mode.

4. DISPLAY MODE INDICATORS

Indicates any one of three display modes successively in order each time the DISPLAY select button is pushed. Refer to item and.

5. OPERATION MODE INDICATORS

PAUSE Indicator: Lights up when the unit is in the pause mode.

PLAY Indicator: Lights up for normal play.

MEMORY, PLAY Indicator: Lights up for memorized play.

6. REPEAT INDICATORS

Indicates the repeat mode which is in use.

ONE: Continuously plays one selection or one memorized selection to which you are listening.

ALL: Continuously plays all selections on a disc or all of the memorized selections.

7. SEARCH BUTTON

During normal play, push ►► button the player will quickly advance toward later selections while the buttons are being pushed. When the buttons are released, play will begin again from that point.

During normal play, push ◄◄ button the player will quickly reverse toward earlier selections while the buttons are being pushed.

When the buttons released, play will begin again from that point.

8. REPEAT BUTTON

Push this button once to play one selection of a disc or one memorized selection. The ONE REPEAT indicator will light.

Push it twice to play all selections of a disc or all of memorized selections. The ALL REPEAT indicator will light.

To cancel the repeated play, push the REPEAT button until both indicators (ONE, ALL) go out, or press the STOP button.

9. MEMORY BUTTON

Up to 32 selections can be programmed to play in any order with the button.

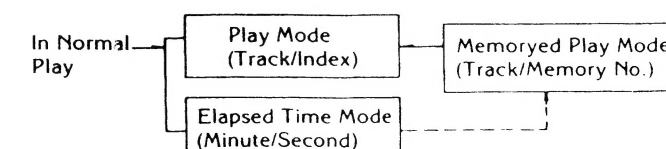
Push this button to select the desired memory number and push the skip button to select the desired selection number on the disc.

To cancel all selection numbers in the memory, push the open/close button.

10. DISPLAY SELECT BUTTON

Selects the mode for the display counter.

The mode changes in order each time the button is pushed. Refer to the chart below.



11. OPEN/CLOSE BUTTON

Push the button once to open or close the disc tray. When the tray is opening, the display counter shows **OPEN**.

When the tray is closing, the display counter shows ----.

NOTE:

Do not push the button twice or more. If you push the button twice, the tray movement will reverse.

12. PLAY/PAUSE BUTTON

Push to start normal or memory play, the play indicator will light.

Push it twice to stop play for a just moment. The pause indicator will light.

Push it again to resume play.

13. STOP BUTTON

Cancels normal play and memory play.

If the STOP button is pushed during normal play or memory play, the laser pick-up located inside of the unit returns to its start position, the disc in the tray stops rotating, and the display counter shows **00**.

14. SKIP BUTTON

Push **▶▶** button for forward jumping or forward music skip.

During normal play:

Push **▶▶** button once. The display counter indicates the next selection number. The laser pick-up advances to the beginning of the next selection, and the unit starts to play the selection. To search for a selection further ahead, push the button until the desired selection number is indicated on the display counter.

During the memory play:

Push this button once. The display counter indicates the next memory number and the memory selection number. The laser pick-up moves to the beginning of the selection which is stored in the next program, and the unit starts to play the selection. To search for a memory further ahead, push the button until the desired memory number is indicated on the display counter.

Push **◀◀** button for backward jumping or backward music skip.

During normal play:

Push **◀◀** button once. The display counter indicates the last section number. The laser pick-up moves to the beginning of the selection currently being played and the unit starts to play it again. To search for a selection further back, press the button until the desired selection number is indicated on the display counter.

During memory play:

Push this button once. The display counter indicates the last played memory number and selection number. The laser pick-up moves to the beginning of the selection which is stored in the last played memory and the unit starts to play the selection. To search a memory further back, push the button until the desired memory number is indicated on the display counter.

15. HEADPHONE VOLUME

This is volume to adjust headphone volume level.

16. HEADPHONE JACK

Plug in headphone jack to this jack when listening through headphones.

17. OUTPUT JACK

This is output jack of audio.

18. POWER SOURCE

19. REMOTE JACK

OPERATION

FOR NORMAL PLAY

1. Turn on the power to your amplifier and select the input source to which this unit is connected.
2. Push in the POWER switch.
3. Push the OPEN/CLOSE button and place a disc on the disc tray.
4. Push the OPEN/CLOSE button again, or front of the disc tray to close it. The display counter will indicate ----.
5. The disc in the tray begins to rotate and the player reads the table of contents (number of selection and playing times) encoded in the lead-in the portion of the disc. The display counter will indicate ---- while it is reading the table of contents. After approximately 8 seconds, the disc will stop to rotate, and the display counter will indicate last selection number in the disc.

For example

If a disc has 12 titles, the display counter shows **1200**.

Wait a just moment until the display counter changes to **00**.

Push the PLAY/PAUSE button. The first selection (TRACK NO. 1) will begin to play. The PLAY and TRACK/INDEX indicators will light and display counter will indicate the track number and index number.

-If you wish to start playing from a particular section, push the skip button (**▶▶**) until the desired section number (TRACK NO.) is indicated on the display counter, then push the PLAY/PAUSE button once.

6. To stop playing for a just moment, push the PLAY/PAUSE button. The PAUSE indicator will light up. To restart, push the PALY/PAUSE button again.

7. When you have finished playing, push the STOP button. When the last selection has finished playing, the player stops itself and the display counter indicates **00**.

8. To open the disc tray, push the OPEN/CLOSE button. The display counter will indicate **OPEN**. Remove the disc.

If you are not going to play a disc immediately, close the disc tray and release the POWER switch to turn the power off.

FOR MEMORY PLAY

Up to 32 selections can be memory play in any order.

1. Switch the unit on.
2. Place a disc on the disc tray, and close the tray. The display counter will indicate ----, then the indication on the display counter will change to the last section number on the disc, wait a just moment until the display counter change to **00**.
3. Push the memory button once. The MEMORY indicator, TRACK/MEMORY NO. indicator will light and the display counter will indicate **01**. Push the SKIP button (**▶▶**) once. The display counter will change to **11**. Push the MEMORY button, the display counter will change to **02**. Now, the 1st section number of the disc is stored into the 1st MEMORY section. [AFTER push the SKIP button (**▶▶** or **◀◀**) until the desired section number of the disc is indicated on the display counter push MEMORY button.]
4. To enter additional selection numbers into the memory, push the SKIP button (**▶▶** or **◀◀**) to enter the desired selection number. Push the MEMORY button.
5. If you wish to check the memory, push the MEMORY button.

NOTE:

- Be not push the SKIP button to check. If the SKIP button is pushed during checking, the section number in the memory will change. Only use the SKIP button feather to cancel or to correct one of the memory selections.
- If you wish to cancel all of the memory selections, push the OPEN/CLOSE button.

6. After memorying, push the PLAY/PAUSE button

- The display counter will indicate memory selection number (TRACK NO.) and the MEMORY NO. 1, the player will begin to play the MEMORY NO. 1 selection. During memory play, MEMORY indicator and PLAY indicator will light simultaneously.

-If you wish to start playing from a desired MEMORY number, push the PLAY/PAUSE button,

then push one of the SKIP buttons (**▶▶** or **◀◀**) until the desired MEMORY number is indicated on the display counter.

7. To stop playing for a just moment, push the PLAY/PAUSE button once.

The PAUSE indicator will light.

To restart, push the PLAY/PAUSE button again.

8. When you have finished playing, push the stop button. If the last MEMORY selection has been played, the play stops itself and the display counter indicates **00**.

9. To open the disc tray, push the OPEN/CLOSE button. If you are not going to play a disc immediately, remove the disc, close the disc tray, and release the power off.

NOTE:

When the memory is empty (no memorying), the player will automatically be set to the normal play mode.

CAUTION:

When the unit is switched off or the disc tray is opened, the memory for memory play is automatically cleared.

SELECTION SKIP OPERATION

By using the SKIP buttons (**▶▶** or **◀◀**) during normal play or memory play, the beginning of the desired selection or the desired memory selection can be easily found. The number of the selection or the number of the memory to be located will be displayed on the front panel.

In the normal play mode:

- To advance to the next selection, push the Forward SKIP button (**▶▶**) once. The next selection number will be indicated on the display counter and the player will begin to play that selection.
- To return the beginning of the selection beginning played, push the Backward SKIP button (**◀◀**) once.
- To advance or to return past several selections, push the Track button (**▶▶** or **◀◀**) repeatedly until the desired selection number is indicated on the display counter.

NOTE:

When the display counter indicates the first or last selection number on the disc, it will not change even if the SKIP button is pushed. The player will begin to play the first or last selection on the disc. To reverse the direction of search, push the other SKIP buttons (**▶▶** or **◀◀**).

In the memory play mode:

Push one of the SKIP buttons (**▶▶** or **◀◀**) until the desired memory number is indicated on the display counter.

If in pause before pushing either SKIP button, the player will go the pause (stand-by at the beginning of the desired selection).

REPEATED PLAY

In the normal play mode:

- To repeat the selection being played, push the REPEAT button once. The ONE REPEAT indicator will light up. The selection will be played repeatedly.
- To repeat all selections on the disc, push the REPEAT button twice. The ALL REPEAT indicator will light up.

In the memory play mode:

- To repeat the memory selection being played, press the REPEAT button once. The ONE REPEAT indicator will light. The memory selection will be played repeatedly.

- To repeat all of the memory selections, push the REPEAT button twice. The ALL REPEAT indicator will light.

To cancel repeated play, push the REPEAT button until both indicators go out. Push the STOP button to stop the repeated play. The player will stop playing and the repeat indicator will go out.

NOTE:

The sensor for the repeated play may not function in the fast forward, fast backward and selection search modes.

TROUBLESHOOTING GUIDE

If you have followed the instructions in the CONNECTING and OPERATION sections and have trouble with your system, locate the SYMPTOM in the left column below. Check the corresponding POSSIBLE CAUSE and CORRECTIVE ACTION columns to find and solve the problem.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Power fails to switch on when POWER switch is depressed.	Incomplete insertion of power plug into socket.	Firmly insert power plug into socket.
Playback does not begin.	Disc is loaded upside down.	Reload the disc with the label side UP.
	Disc is too dirty.	Clean the disc.
No sound.	Improper output cable connection.	Connect output cables properly.
	Improper operation of amplifier.	Make sure that amplifier controls are set properly.
Sound "skips".	Player subject to vibrations or physical shock.	Change location of installation.
Memory playback will not function.	Memory has been erased.	Re-enter memory.
	Unit is in normal playback mode.	Push STOP button and then begin memory playback.

SPECIFICATIONS

AUDIO PERFORMANCE

Number of channels : 2 ch
 Frequency response : 5 Hz – 20 KHz
 (+0 – 1.0 dB)
 Dynamic range : More than 90 dB
 Signal-to-noise ratio : More than 90 dB (1 KHz)
 Channel separation : More than 90 dB (1 KHz)
 Wow and flutter : Quartz crystal precision

SIGNAL FORMAT

Sampling frequency : 44.1 KHz
 Quantization : 16 bits linear
 Bit rate : 4.3218 million bits/sec.

DISC

Diameter : 120 mm (4-3/4") 500-200 rpm (inside-outside)
 Tracking pitch : 1.6 μ m
 Playing time : 60 min. (Max.: 74 min.)
 Tracking system : Non-contact solid state Laser
 Laser tracking at PCM
 Wavelength 780 nm

*Because its products are subject to continuous improvements, Sears reserves the right to modify product designs and specifications without notice and without incurring any obligation.

BEFORE USE OR TRANSPORTATION

BEFORE FURE (Fig. 1)

1. Provide yourself with a cross-slot screwdriver.
2. Remove three SHIPPING SCREWS located on the bottom of the unit.
 The removed screws should be retained in case any subsequent transportation of the unit is required.

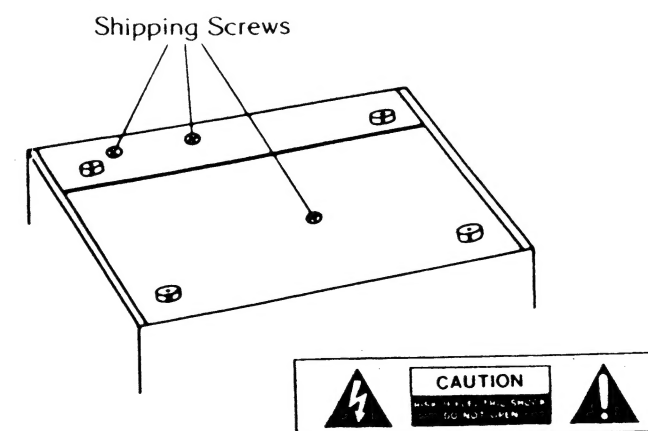
NOTE:

Do not remove any other screws.

BEFORE TRANSPORTING THE UNIT

Before transporting the unit, secure the SHIPPING SCREWS to avoid damage to the mechanism.

1. Switch the unit on by pressing the POWER switch.
2. Push the STOP button.
 Be sure that there is no disc in the disc tray. If you are not sure, push the OPEN/CLOSE button to open the disc tray. Remove the compact disc from the tray, then push the OPEN/CLOSE button again to close the tray.
3. After the display stops flashing on and off, push the POWER switch again to switch the unit off.
4. Secure the SHIPPING SCREWS. Refer to Fig. 1.



WARNING:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



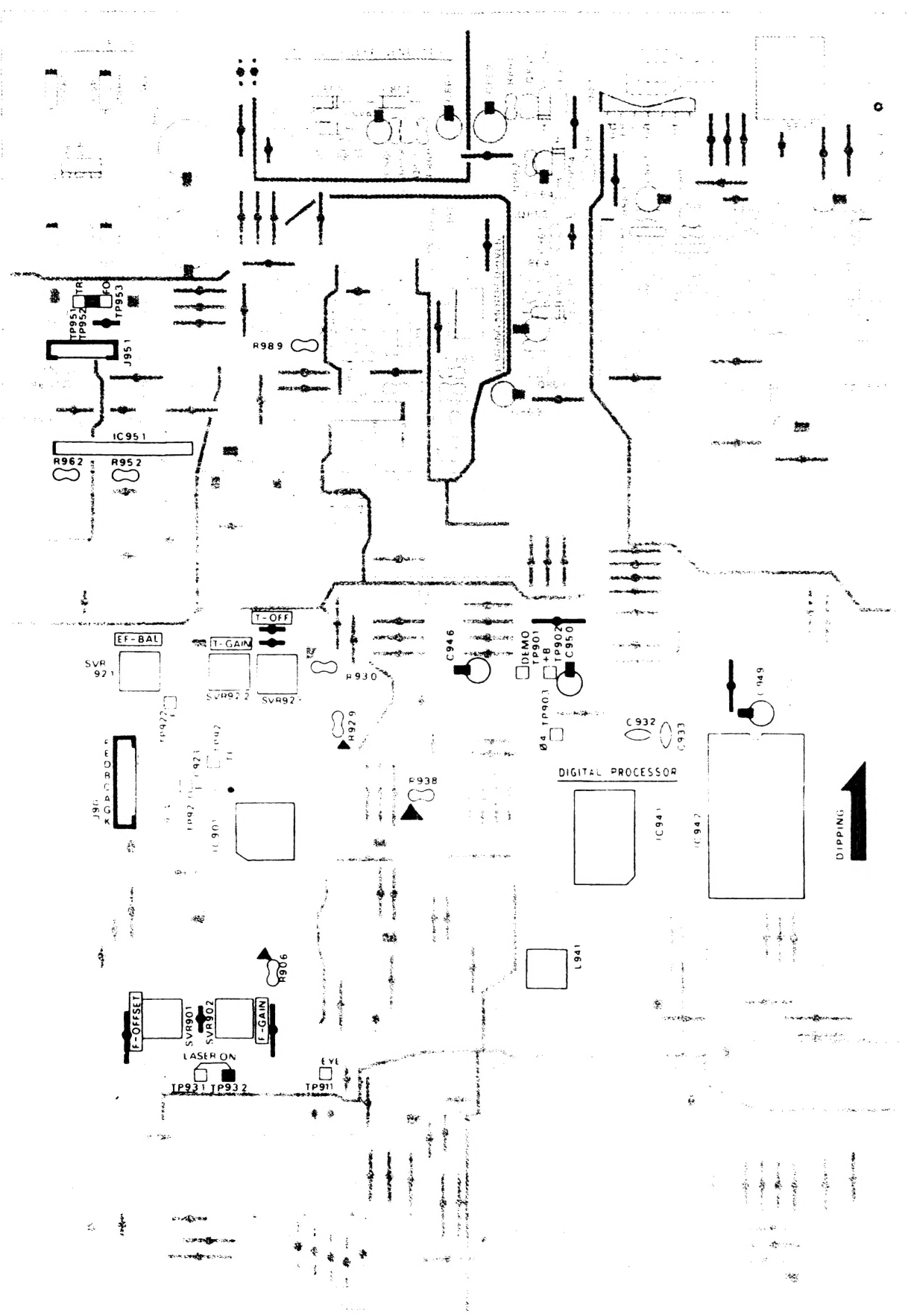
This symbol indicates that dangerous voltage constituting risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instruction in the literature accompanying this unit.

FOR SAFE AND EFFICIENT OPERATION

- Be careful that the power cord does not become damaged.
- When hot is use, disconnect the power cord from the outlet. Grasp the plug when disconnecting the cord.
- If water is spilled on the unit, electrical shock or malfunction may result.
- Do not disassemble or alter this unit in any way.
- Do not use this player where there are extremes in temperature (below 41 °F/5 °C or exceeding 95 °F/35 °C) or where direct sunlight may strike it.
- Do not use damp or dusty places.
- Place the player in a stable location and in a horizontal position.
- Do not obstruct the air holes or place the player on an amplifier or anything that may give off heat.
- Because of the player's extremely low noise and wide dynamic range, there might be a tendency to turn the volume on the amplifier unnecessarily high. Doing so may produce an excessively large output from the amplifier which could damage your speakers.
- Sudden changes in the surrounding temperature can cause dew to form on the optical lens inside. In this condition, the laser cannot pick up the signal and the unit will not operate properly. If this should happen, do not use the player until it has adjusted to the surrounding temperature.
- Do not use volatile chemicals on this unit (insecticides, etc.). Clean by lightly wiping with a soft cloth.

**SYSTEM DESCRIPTION OF THE DIGITAL COMPACT DISC PLAYER**

Conventional 45 RPM, 78 RPM and LP records are all made using analog recording techniques in which the audio signals are recorded as mechanical deflections in the shape of the actual waves on the disc surface. When the audio signal is reproduced from such a recording, the performance of the reproduction is subject to noise interference caused by scratches, dust and dirt on the record surface. In the digital recording system, the audio signal is changed into a binary encoded signal which is not susceptible to noise interference. More than five billion bits (binary digits) of information are stored on one 4-3/4" (12 cm) diameter digital disc. The bits are read by an optical laser pickup system at a rate of 4.3 million bits per second, providing very high accuracy and fidelity. The actual bits are recorded in a helical track and have microscopic dimensions. They are either a flat surface representing 1 or a pit representing 0.

The Digital Audio Disc Playback System is free from speed variations and wow and flutter is reduced to quartz crystal accuracy. An Optical Laser Pickup System is used to decode and retrieve the digital information. A laser beam is produced by a semiconductor, then passed through a lens and projected onto the bottom surface of the compact disc. Fluctuations in the intensity of the reflected light are picked up and decoded. There is no mechanical contact between the record surface and the optical pickup system, and the stored information on the record itself is protected by a plastic coating.

ADJUSTMENT PROCEDURES

- When you disassemble the mechanism, replace the parts of the electrical components, or the laser pick-up. Be sure to perform the adjustments.
- Adjustments should be made in the following procedure.

SEP 1. VCO ADJUSTMENT

1. Push the power switch. (Stop mode)
2. Connect frequency counter to TP903 of main PC board.
3. Adjust L941 using a plastic screwdriver so that frequency counter reading is 4.3218 MHz ± 10 KHz.

STEP 2. TRACKING OFFSET ADJUSTMENT

1. Connect the oscilloscope to the TP951.
2. Push the power switch.
3. Open the disc tray.
4. Short the R938 to GND.
5. Adjust SVR923, so that the DC voltage of the TP 951 is between +20 mV and -20 mV on the screen of the oscilloscope.
6. After adjustment return the R938 to the original state.

NOTE:

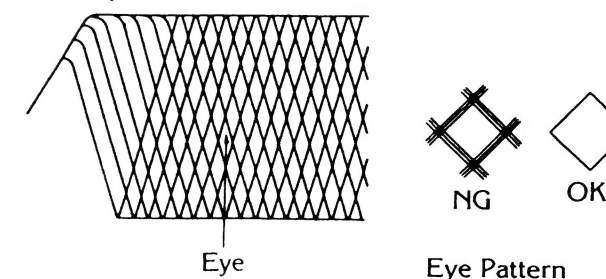
Perform this adjustment once again after adjusting the E/F BALANCE and TRACKING GAIN.

STEP 3. FOCUS OFFSET ADJUSTMENT

1. Connect the oscilloscope to the TP953 of the main PC board.
2. Push the power switch.
3. Open the disc tray.
4. Short the (+) of C946 to GND.
5. Adjust SVR901, so that the DC voltage of the TP953 is 0 ± 20 mV on the screen of the oscilloscope.
6. After adjustment return the (+) of C946 to the original state.

STEP 4. AZIMUTH ADJUSTMENT

1. Connect the jitter meter to TP911 of the main PC board. (Use 10:1 probe)
2. Push the power switch.
3. Remove the disc tray of mechanism unit. (refer to NOTE)
4. Load the disc (YEDS-1) and play the set at the middle range of the disc (about track no. 8).
5. Turn the azimuth adjusting screw of the mechanism, so that the jitter meter reading can be maximum value. (Less than 28 n sec.)
6. Be without the jitter meter, connect the oscilloscope to TP911 of the main PC board.
7. Turn the azimuth adjusting screw of the mechanism, so that the thin and clear line of the eye pattern appears on the oscilloscope with the Waveform in the maximum state.
9. The RF output level is more than 1.2Vp-p at the TP911.
10. After adjustment reassemble the disc tray to mechanism.



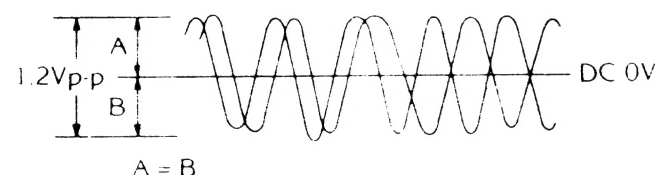
MODEL NO. TCD-4070

NOTE: REMOVING THE DISC TRAY

1. Push the power switch and press the OPEN/CLOSE button to open the DISC TRAY.
2. Apply OFF the power switch while the DISC TRAY is open, and push the DISC TRAY back in by hand to close it.
3. Pull out the DISC TRAY by the hand to open it again. The DISC TRAY will disengage easily and come out smoothly.
4. Now remove the DISC TRAY from the mechanism while pressing the hook of the mechanism.

STEP 5. EF BALANCE ADJUSTMENT

1. Connect the oscilloscope to TP921 and of the main PCB.
2. Push the power switch.
3. Load the disc (YEDS-1) and play at the middle range of the disc (about track no. 8) in demo play mode.
4. Short both terminal of R962, and short both terminal of R989.
5. Adjust SVR921, so that the center of the waveform of the oscilloscope become to 0 V dc \pm 20 mVdc
6. The level of the waveform of the oscilloscope is more than 1.2Vp-p.
7. After adjustment return the R962 and R989 to the original state.

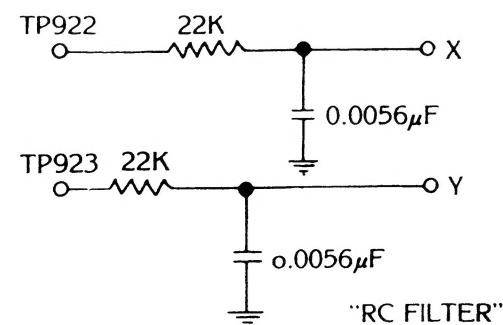


NOTE:

- Demo play mode: Without a command from micro processor, set play mode LSI itself.
 - Short between TP931 and TP932 (GND).
 - After elapsed about 2 second, short between TP901 (Demo) and TP902 (+ 5V).

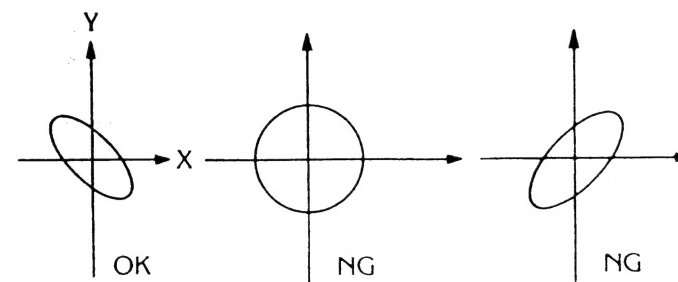
STEP 6. DEFLECTION GRATING OBSERVATION

1. Connect the RC filter to both TP922, TP923 of the main PCB.



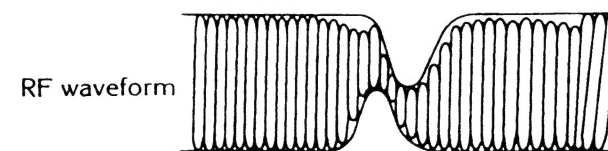
"RC FILTER"

2. Connect the input X of the oscilloscope to TP922, and input Y of the oscilloscope to TP923 of the main PCB. (Input sensitivity of the oscilloscope is AC 20 mV/DIV.)
3. Push the power switch.
4. Load the disc (YEDS-1), play at the middle range of the disc (about TRACK NO. 8) in the DEMO PLAY MODE.
5. Short both lead of R962, and both lead of R989.
6. Observe the lissajous waveform of the oscilloscope which appears at X-Y operation.



STEP 7.

1. Connect the oscilloscope to the TP911 of the main PCB.
2. Connect the EXT. TRIG INPUT of the oscilloscope to the TP923 of main PCB. (EXT. TRIGGER MODE)
3. Push the power switch.
4. Load the disc (YEDS-1), play at the middle range of the disc (about TRACK NO. 8).
5. Observe the RF waveform.
(The RF waveform appears in the right side of the screen at 2u-SEC range.)

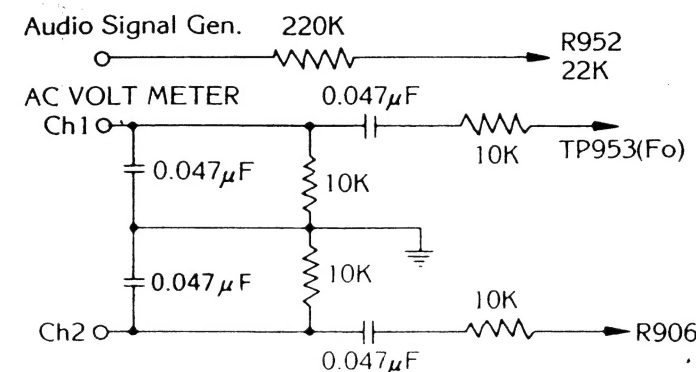


MODEL NO. TCD-4070

STEP 8. FOCUS GAIN ADJUSTMENT

1. Connect the bandpass filter to TP953 (FO) and R906 of the main PCB, 2 ch ac volt meter to ch1, ch2, and audio signal generator to R952 (PIN NO. 6 of the IC951) through series resistor 220 Kohm.
2. Input 1 KHz, 1 Vrms to series resistor 220 Kohm.
3. Supply power to the unit. Insert the unit with the test disc (YEDS-1), then set the unit in the play mode.
4. Adjust SVR902, so that the level of ch1 is greater than ch2 as 16 dB \pm 1 dB. (ch1-ch2 = 16 dB \pm 1 dB).

(Bandpass Filter of step 8, 9)



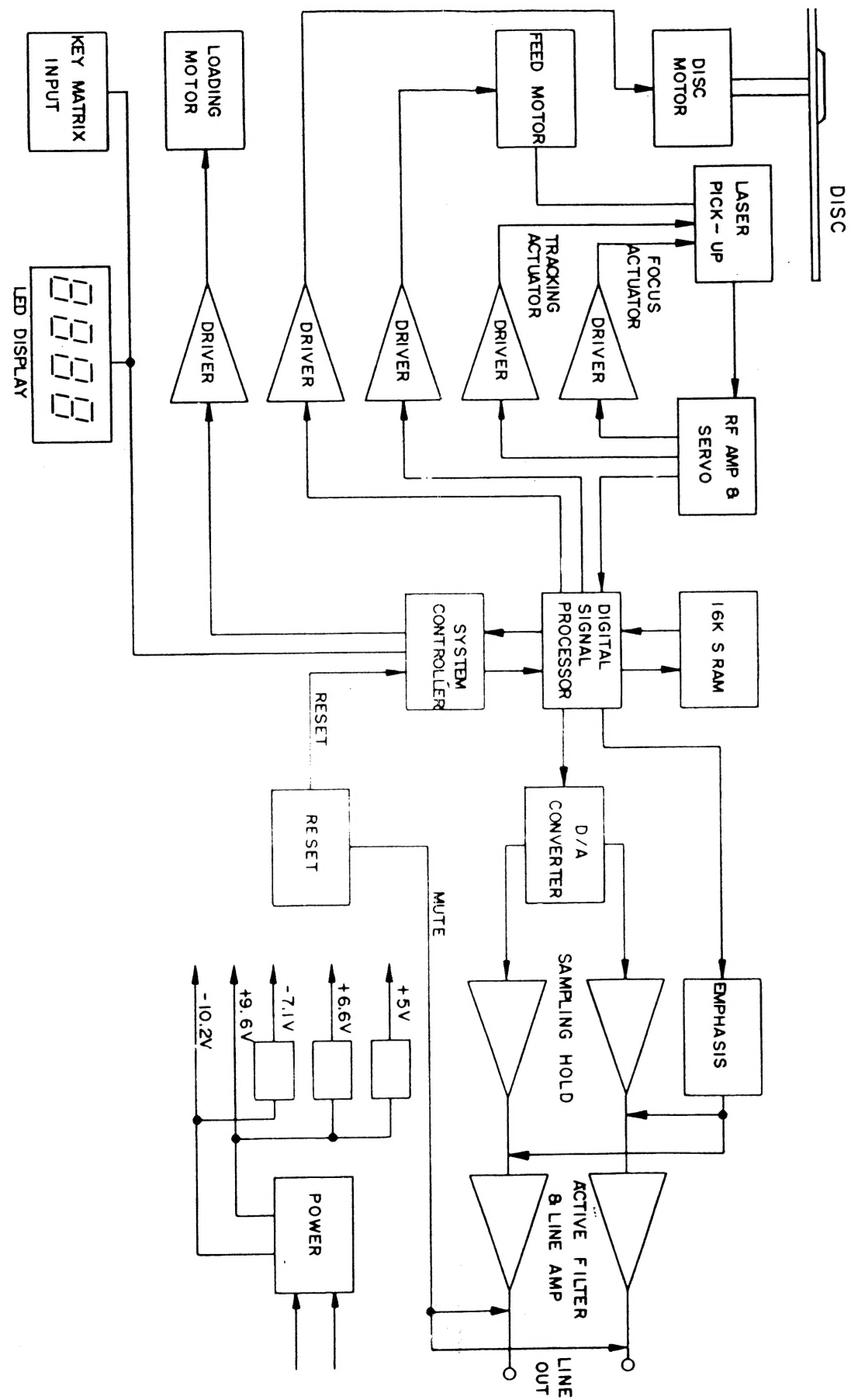
STEP 9. TRACKING GAIN ADJUSTMENT

1. Connect the bandpass filter which was used at step 8 (Focus gain adjustment) to TP951 (TR) and R929 of the main PCB, 2ch Voltmeter to ch1, ch2, and audio signal generator to R930 (PIN NO. 7 of the IC951) through series resistor 220 Kohm.
2. Input 1.1 KHz, 200mVrms to series resistor 200 Kohm.
3. Supply power the unit, lead the unit with the test disc (YEDS-1), then set the unit in the play mode.
4. Adjust SVR922, so that level of the ch2 is greater than ch1 as 3 dB \pm 1 (ch2-ch1 = 3 dB \pm 1 dB).

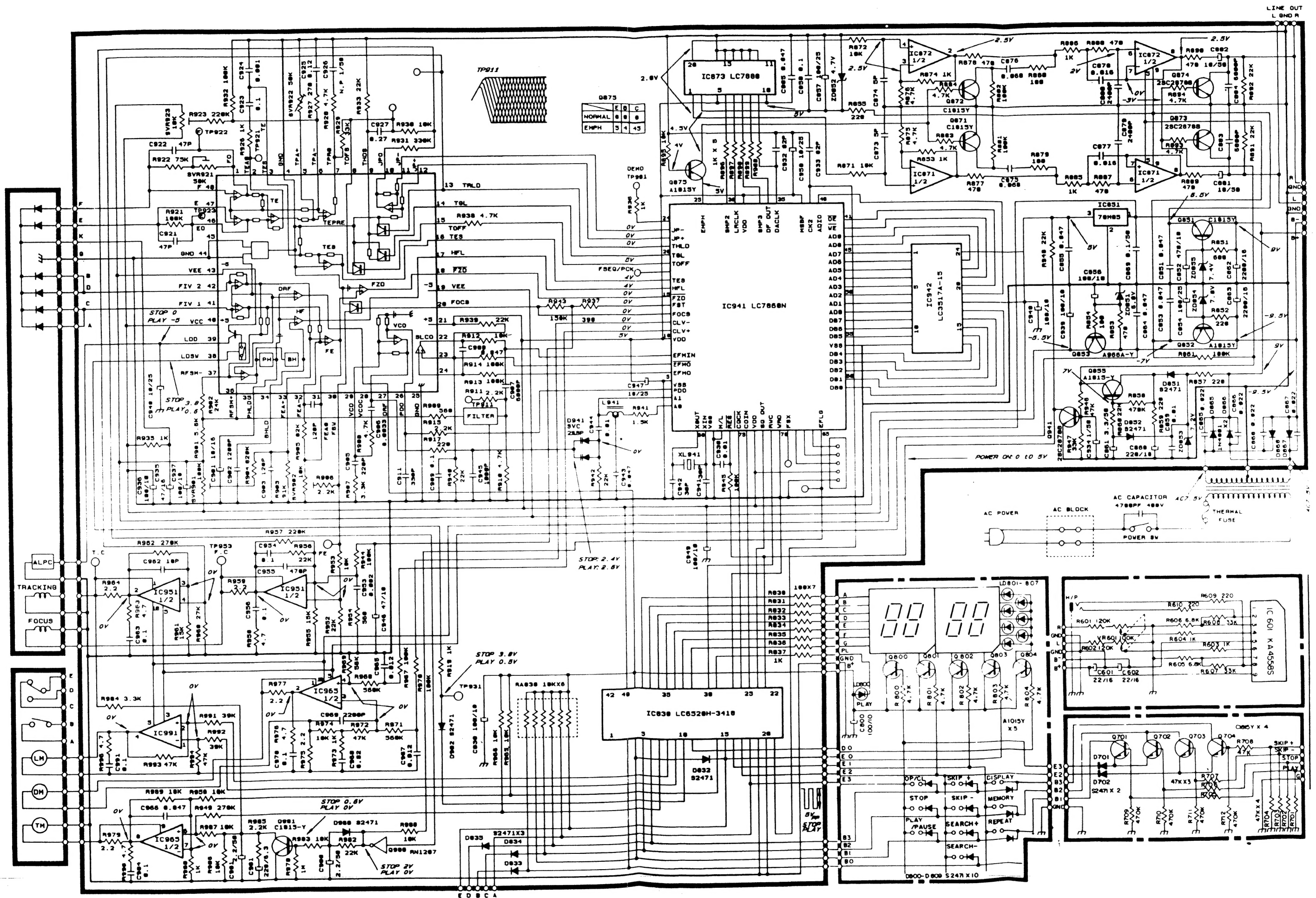
STEP 10.

After all steps of adjustment over, confirm STEP 2 (TRACKING OFFSET ADJUSTMENT), STEP 3 (FOCUS OFFSET ADJUSTMENT) once more again.

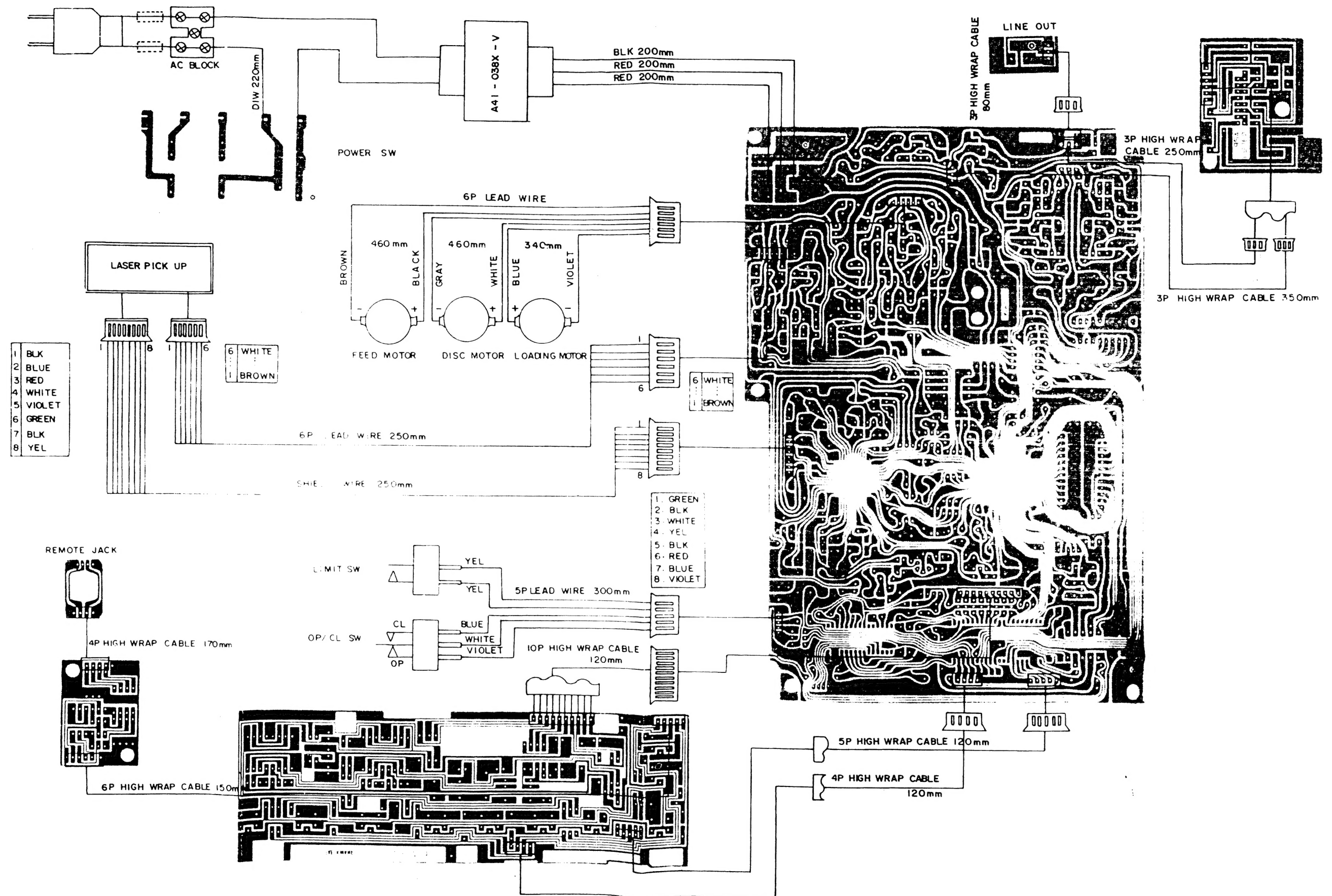
MODEL NO. TCD-4070
BLOCK DIAGRAM



MODEL NO.TCD-4070
SCHEMATIC DIAGRAM

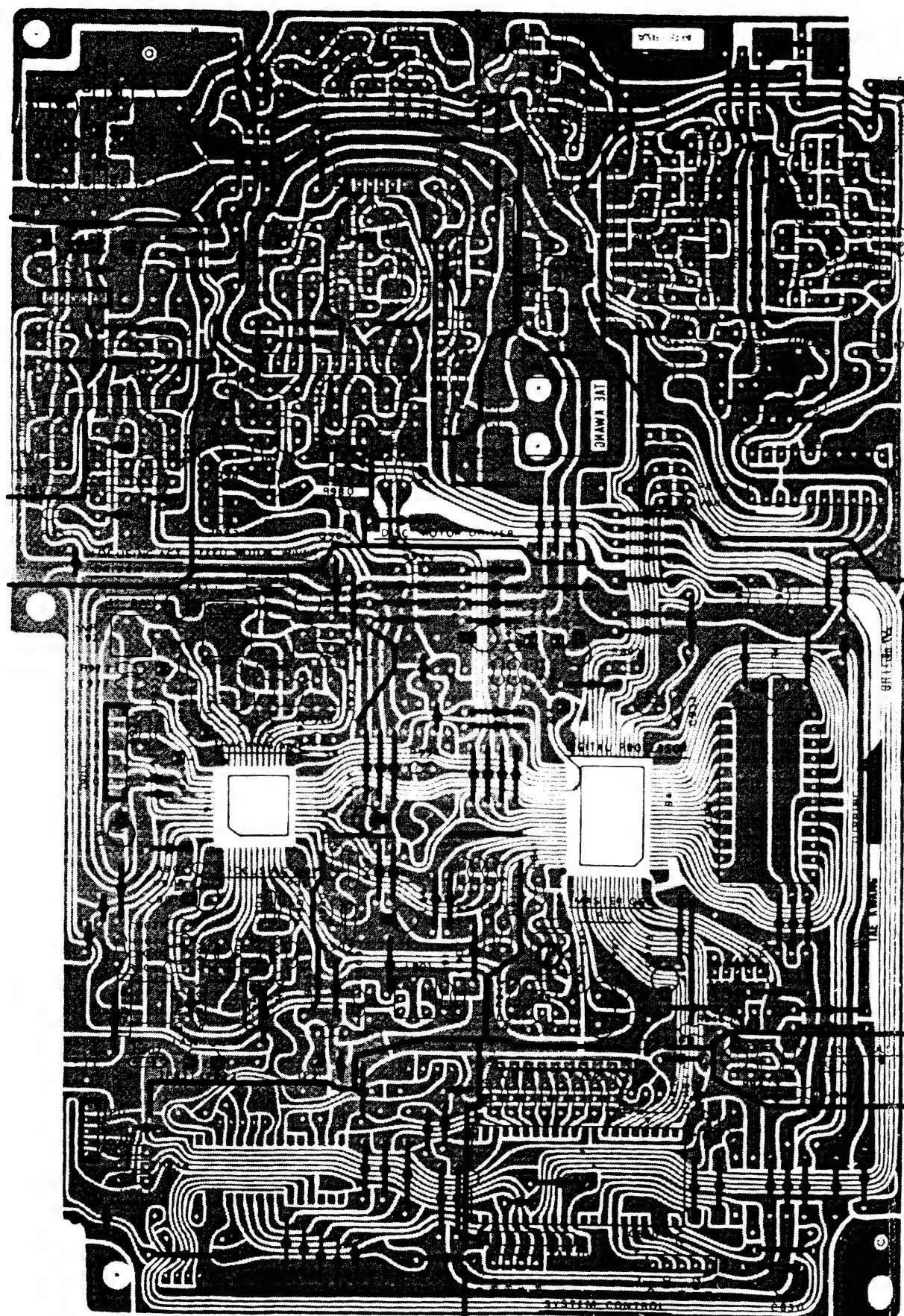


MODEL NO.TCD-4070 WIRING DIAGRAM

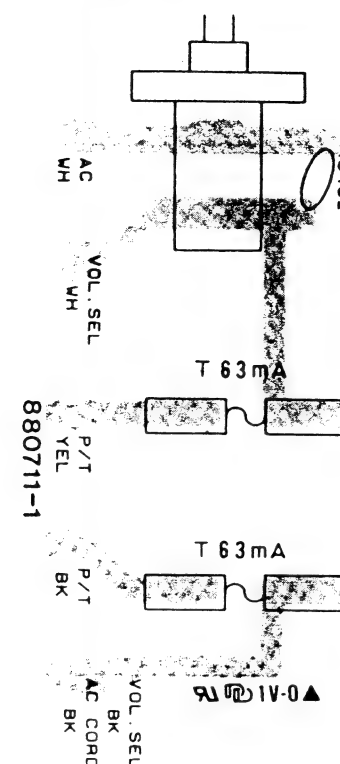


MODEL NO. TCD-4070
PCB LAYOUT

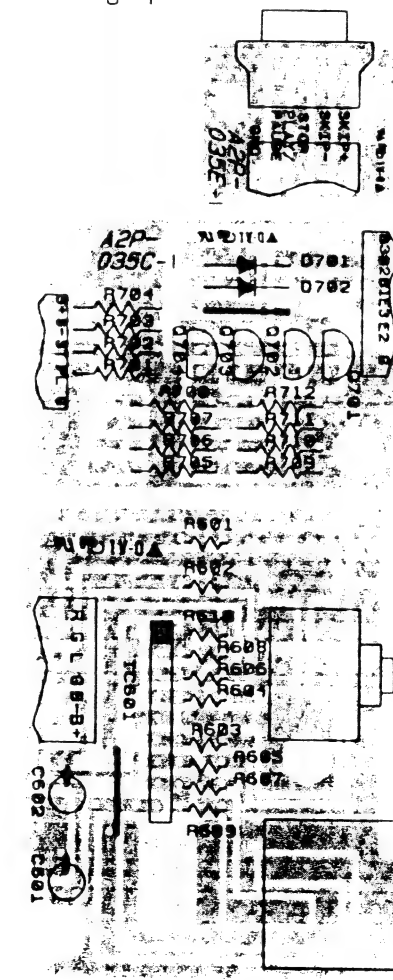
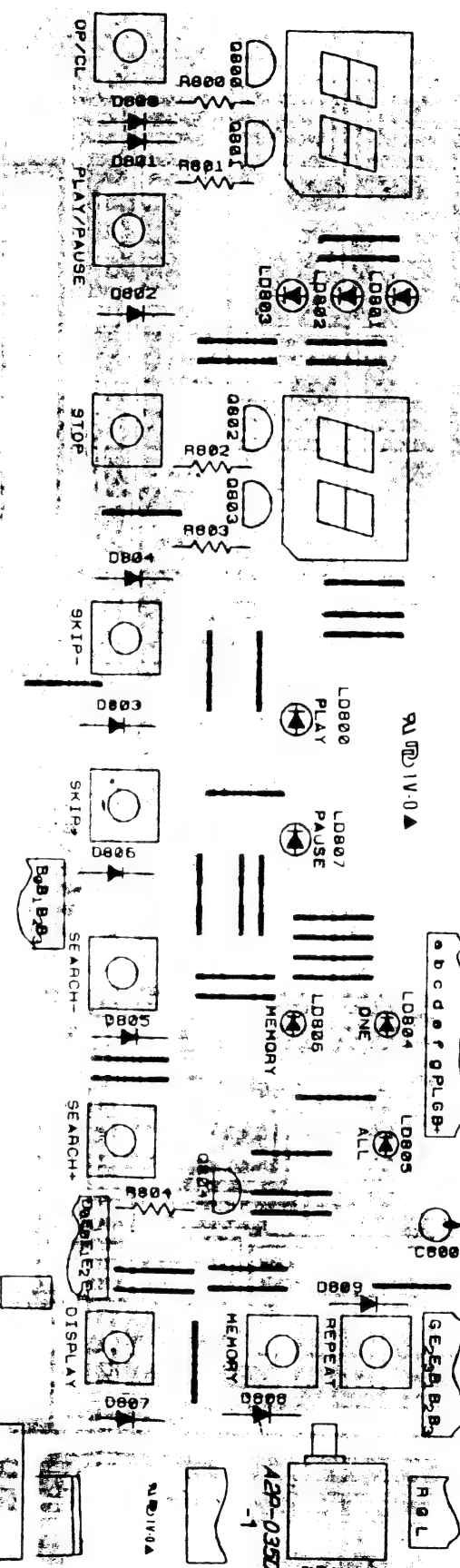
MAIN PART



POWER PART



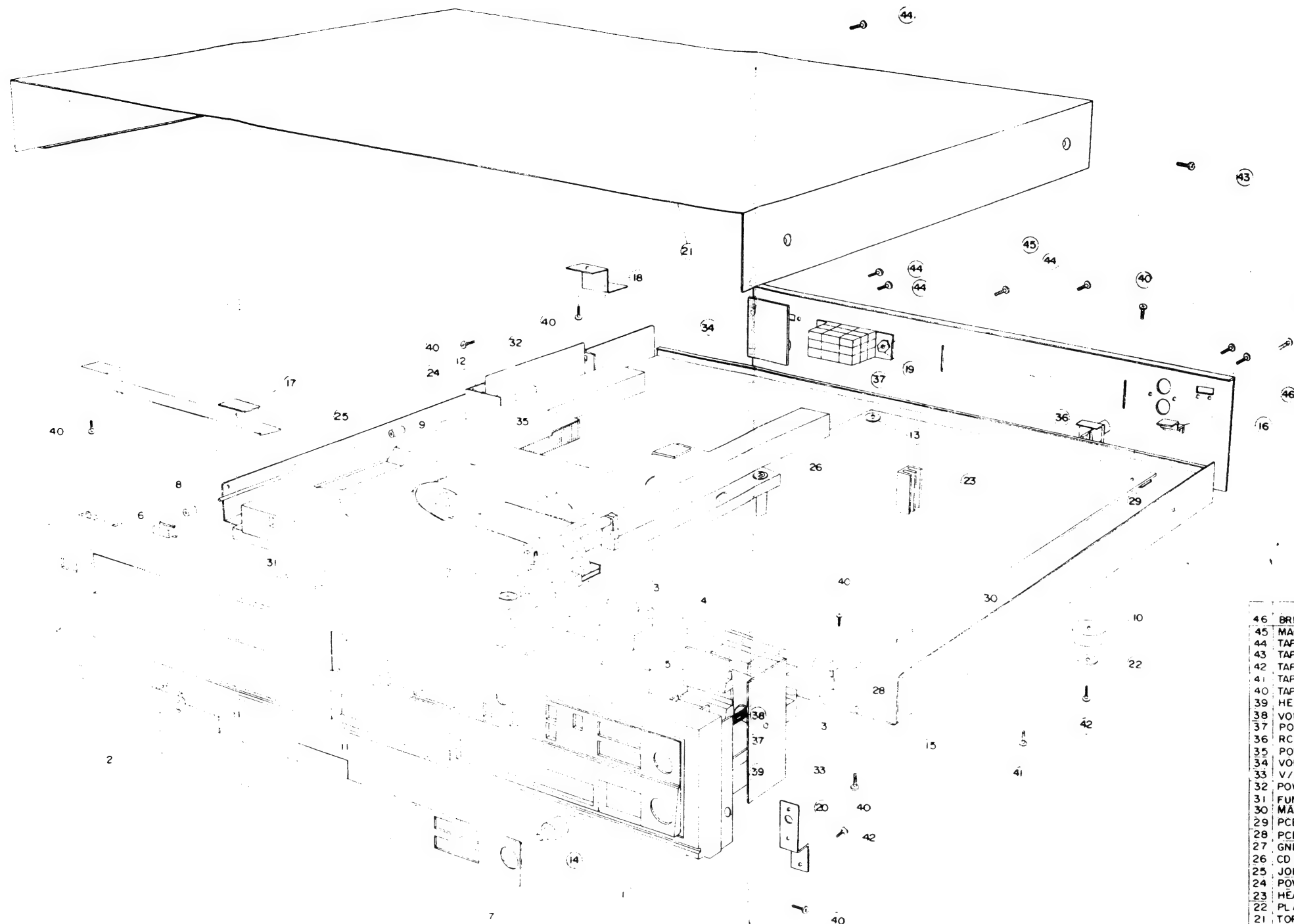
DISPLAY PART



HEADPHONE PART

RCA JACK PART

MODEL NO. TCD-4070
EXPLODED VIEW



46	BRKT - REMOTE	A4MC - 0748
45	MACHINE SCREW	M4X8 Fe-ZB
44	TAPPING SCREW	BHT2T 03X6 Fe-ZB
43	TAPPING SCREW	FHT2T 03X6 Fe-ZB
42	TAPPING SCREW	BHT2T 03X12 Fe-Zy
41	TAPPING SCREW	BHT2T 03X8 Fe-Zy
40	TAPPING SCREW	BHT2T 03X6 Fe-Zy
39	HEAD PHONE JACK	
38	VOLUME	
37	POWER TRANS	
36	RCA JACK	
35	POWER S/W	
34	VOLUME SELECTOR PCB	
33	V/R PCB	
32	POWER PCB	
31	FUNCTION PCB	
30	MAIN PCB	
29	PCB BRACKET - C	A4MC - 0453
28	PCB BRACKET - A	A4MC - 0448
27	GND TERMINAL	A4MC - 0428
26	CD MECHANISM	
25	JOINT	A4MC - 0447
24	POWER S/W BRACKET	A4MC - 0421
23	HEAT SINK	4PC - 1400-02
22	PLAIN WASHER	
21	TOP COVER	AIM - 0048
20	V/R BRACKET	A4MC - 0450
19	NUT	HEX M4X0.7 Fe-Zy
18	CD BRACKET - B	A4MC - 0421
17	CD BRACKET - F	A3MC - 0116
16	BACK CHASSIS	A2MC - 0156
15	BOTTOM CHASSIS	AIM - 0042
14	KNOB - REC. MIC	A4MF - 0206
13	PLAIN WASHER	
12	FIBER	A4MG - 0354
11	DISPLAY FILTER	A4MG - 0307
10	FOOT	A4MG - 0206
9	JOINT POWER S/W	A4MG - 0304
8	KNOB - CONNECTOR	A4MG - 0306
7	WINDOW	A4MF - 0103
6	POWER KNOB	A4MF - 0298
5	TACT S/W KNOB - C	A4MF - 0313
4	TACT S/W KNOB - B	A4MF - 0312
3	TACT S/W KNOB - A	A3MF - 0113
2	CD-DOOR	A3MF - 0102
1	PANEL MOLD	AIM - 0049
NO.	PARTS NAME	DRAWING NO.

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
IC	PC	1	KA4558S	IC601
IC	PC	1	LC6520H-3418	IC830
IC	PC	1	MC7805C	IC851
IC	PC	2	MJM4560S-B	IC871, 872
IC	PC	1	LC7880	IC873
IC	PC	1	LA9200	IC901
IC	PC	1	LC7860N	IC941
IC	PC	1	LC3517A-15	IC942
IC	PC	2	LA6510	IC951, 965
IC	PC	1	LA6500	IC991
TRANSISTOR	PC	4	KTC1815-Y	Q701, 702, Q703, 704
TRANSISTOR	PC	5	KTA1015-Y	Q800, 801, 802, Q803, 804
TRANSISTOR	PC	1	KTC1815-Y	Q851
TRANSISTOR	PC	1	KTA1015-Y	Q852
TRANSISTOR	PC	1	KTA966A-Y	Q853
TRANSISTOR	PC	1	KTA1015-Y	Q855
TRANSISTOR	PC	2	KTC1815-Y	Q871, 872
TRANSISTOR	PC	2	2SC 2878B-RT	Q873, 874
TRANSISTOR	PC	1	KTA1015-Y	Q875
TRANSISTOR	PC	1	2SC 2878B-RT	Q941
TRANSISTOR	PC	1	RN1207-RT	Q980
TRANSISTOR	PC	1	KTC1815-Y	Q981
SI DIODE	PC	2	IS2471	D701, 702
SI DIODE	PC	5	IS2471	D801, 802, 803, D804, 805
SI DIODE	PC	4	IS2471	D806, 807, 808, D809
SI DIODE	PC	3	ISS131	D832, 833, 834
SI DIODE	PC	3	ISS131	D835, 851, 852
SI DIODE	PC	4	IN4001	D865, 866, 867, D868
SI DIODE	PC	1	ISS131	D902
SI DIODE	PC	1	SVC211SP-B, C	D941
SI DIODE	PC	1	ISS131	D980
ZENER DIODE	PC	1	MTZ 6.2A, 6.2V, 1/2W	ZD851
ZENER DIODE	PC	1	MTZ 4.7B, 4.7V, 1/2W	ZD852
ZENER DIODE	PC	1	MTZ 7.5B, 7.5V, 1/2W	ZD853
ZENER DIODE	PC	1	MTZ 8.2A, 8.2V, 1/2W	ZD854
ZENER DIODE	PC	1	MTZ 7.5C, 7.5V, 1/2W	ZD855
LED	PC	4	SLB55VR4 (RED)	LD800, 801, 802, D803
LED	PC	4	(RED)	LD804, 805, 806, LD807
ELECTROLYTIC CAPACITOR	PC	2	10uF, 16V, 20%	C601, 602
ELECTROLYTIC CAPACITOR	PC	1	47uF, 6.3V, 20%	C800
ELECTROLYTIC CAPACITOR	PC	1	100uF, 10V, 20%	C830
CERAMIC CAPACITOR	PC	1	0.047uF, 50V, F	C851
ELECTROLYTIC CAPACITOR	PC	1	470uF, 10V, 20%	C852
CERAMIC CAPACITOR	PC	1	0.047uF, 50V, F	C853
ELECTROLYTIC CAPACITOR	PC	1	100uF, 25V, 20%	C854
CERAMIC CAPACITOR	PC	1	0.47uF, 50V, F	C855

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
ELECTROLYTIC CAPACITOR	PC	1	100uF, 10V, 20%	C856
ELECTROLYTIC CAPACITOR	PC	1	100uF, 25V, 20%	C857
MYLAR CAPACITOR	PC	1	0.1uF, 50V, 5%	C858
CERAMIC CAPACITOR	PC	1	0.01uF, 50V, F	C859
ELECTROLYTIC CAPACITOR	PC	1	220uF, 10V, 20%	C860
ELECTROLYTIC CAPACITOR	PC	1	3.3uF, 50V, 20%	C861
ELECTROLYTIC CAPACITOR	PC	2	2200uF, 16V, 20%	C862, 863
CERAMIC CAPACITOR	PC	1	0.047uF, 50V, F	C864
CERAMIC CAPACITOR	PC	4	0.022uF, 50V, F	C865, 866, 867, 868
ELECTROLYTIC CAPACITOR	PC	1	0.1uF, 50V, 20%	C869
CERAMIC CAPACITOR	PC	2	5pF, 50V, 5%, CH	C873, 874
MYLAR CAPACITOR	PC	2	0.068uF, 50V, 5%	C875, 876
MYLAR CAPACITOR	PC	2	0.015uF, 50V, 5%	C877, 878
MYLAR CAPACITOR	PC	2	0.0022uF, 50V, 5%	C879, 880
ELECTROLYTIC CAPACITOR	PC	2	10uF, 50V, 20%	C881, 882
MYLAR CAPACITOR	PC	2	0.0068uF, 50V, 5%	C883, 884
CERAMIC CAPACITOR	PC	1	0.047uF, 50V, F	C885
ELECTROLYTIC CAPACITOR	PC	1	10uF, 16V, 20%	C901
CERAMIC CAPACITOR	PC	1	1200pF, 50V, B	C902
CERAMIC CAPACITOR	PC	2	120pF, 50V, 5%, CH	C903, 904
CERAMIC CAPACITOR	PC	1	220pF, 50V, SL	C905
MYLAR CAPACITOR	PC	1	0.0033uF, 50V, 5%	C906
MYLAR CAPACITOR	PC	1	0.0068uF, 50V, 5%	C907
MYLAR CAPACITOR	PC	1	0.047uF, 50V, 5%	C908
MYLAR CAPACITOR	PC	1	0.1uF, 50V, 5%	C909
STYROL CAPACITOR	PC	1	330pF, 100V, 5%	C911
CERAMIC CAPACITOR	PC	2	47pF, 50V, 5%, CH	C921, 922
MYLAR CAPACITOR	PC	1	0.1uF, 50V, 5%	C923
CERAMIC CAPACITOR	PC	1	1000pF, 50V, B	C924
METALLIZED FILM CAPACITOR	PC	1	ECQVIH 124JZ-RT	C925
ELECTROLYTIC CAPACITOR (NON-POLAR)	PC	1	1uF, 50V, 20%	C926
METALLIZED FILM CAPACITOR	PC	1	ECQVIH 275JZ-RT	C927
CERAMIC CAPACITOR	PC	2	82pF, 50V, 5%, CH	C932, 933
ELECTROLYTIC CAPACITOR	PC	1	1uF, 50V, 20%	C934
ELECTROLYTIC CAPACITOR	PC	1	47uF, 16V, 20%	C935
ELECTROLYTIC CAPACITOR	PC	2	100uF, 10V, 20%	C936, 937
MYLAR CAPACITOR	PC	1	0.01uF, 50V, 5%	C938
ELECTROLYTIC CAPACITOR	PC	1	100uF, 10V, 20%	C939
ELECTROLYTIC CAPACITOR	PC	1	10uF, 25V, 20%	C940
CERAMIC CAPACITOR	PC	2	30pF, 50V, 5%, CH	C941, 942
MYLAR CAPACITOR	PC	1	0.047uF, 50V, 5%	C943
MYLAR CAPACITOR	PC	1	0.01uF, 50V, 5%	C944
MYLAR CAPACITOR	PC	1	0.001uF, 50V, 5%	C945
ELECTROLYTIC CAPACITOR	PC	2	47uF, 10V, 20%	C946
ELECTROLYTIC CAPACITOR	PC	1	10uF, 25V, 20%	C947
ELECTROLYTIC CAPACITOR	PC	2	100uF, 10V, 20%	C948, 949
ELECTROLYTIC CAPACITOR	PC	1	10uF, 25V, 20%	C950
MYLAR CAPACITOR	PC	1	0.082uF, 50V, 5%	C953
MYLAR CAPACITOR	PC	1	0.1uF, 50V, 5%	C954
CERAMIC CAPACITOR	PC	1	470pF, 50V, SL	C955
CERAMIC CAPACITO	PC	1	0.1uF, 50V, F	C956
CERAMIC CAPACITOR	PC	1	18pF, 50V, 5%, CH	C962

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
CERAMIC CAPACITOR	PC	1	0.1uF, 50V, F	C963
MYLAR CAPACITOR	PC	1	0.012uF, 50V, 5%	C965
MYLAR CAPACITOR	PC	1	0.047uF, 50V, 5%	C966
MYLAR CAPACITOR	PC	1	0.012uF, 50V, 5%	C967
MYLAR CAPACITOR	PC	1	ECQVIH 824JZ-RT	C968
METALLIZED FILM CAPACITOR	PC	1	0.0022uF, 50V, 5%	C969
MYLAR CAPACITOR	PC	1	0.1uF, 50V, F	C970
CERAMIC CAPACITOR	PC	1	2.2uF, 50V, 20%	C980
ELECTROLYTIC CAPACITOR	PC	1	220uF, 6.3V, 20%	C981
ELECTROLYTIC CAPACITOR	PC	1	2.2uF, 50V, 20%	C982
ELECTROLYTIC CAPACITOR	PC	2	0.1uF, 50V, F	C984, 991
CERAMIC CAPACITOR	PC	2	120Kohm, 1/8W, 5%	C601, 602
CARBON FILM RESISTOR	PC	2	1Kohm, 1/8W, 5%	R603, 604
CARBON FILM RESISTOR	PC	2	6.8Kohm, 1/8W, 5%	R605, 606
CARBON FILM RESISTOR	PC	2	33Kohm, 1/8W, 5%	C607, 608
CARBON FILM RESISTOR	PC	2	220ohm, 1/8W, 5%	C609, 610
CARBON FILM RESISTOR	PC	8	47Kohm, 1/8W, 5%	R701, 702, 703, 704, 706, 707, 708, 709
CARBON FILM RESISTOR	PC	4	470Kohm, 1/8W, 5%	R709, 710, 711, 712
CARBON FILM RESISTOR	PC	5	4.7Kohm, 1/4W, 5%	R800, 801, 802, 803, 804
CARBON FILM RESISTOR	PC	4	180ohm, 1/8W, 5%	R830, 831, 832, 833
CARBON FILM RESISTOR	PC	3	180ohm, 1/8W, 5%	R834, 835, 836
CARBON FILM RESISTOR	PC	1	2.2Kohm, 1/8W, 5%	R837
CARBON FILM RESISTOR	PC	1	680ohm, 1/8W, 5%	R851
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R852
CARBON FILM RESISTOR	PC	1	470ohm, 1/8W, 5%	R853
CARBON FILM RESISTOR	PC	1	100ohm, 1/8W, 5%	R854
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R855
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R857
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R858
CARBON FILM RESISTOR	PC	1	470Kohm, 1/8W, 5%	R859
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R860
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R861
CARBON FILM RESISTOR	PC	1	100Kohm, 1/8W, 5%	R871, 872
CARBON FILM RESISTOR	PC	2	10Kohm, 1/8W, 5%	R873, 874
CARBON FILM RESISTOR	PC	2	1Kohm, 1/8W, 5%	R875, 876
CARBON FILM RESISTOR	PC	2	4.7Kohm, 1/8W, 5%	R877, 878
CARBON FILM RESISTOR	PC	2	470ohm, 1/8W, 5%	R879
CARBON FILM RESISTOR	PC	1	180ohm, 1/8W, 5%	R880
CARBON FILM RESISTOR	PC	1	180ohm, 1/8W, 5%	R881, 882
CARBON FILM RESISTOR	PC	2	100Kohm, 1/8W, 5%	R883, 884
CARBON FILM RESISTOR	PC	2	4.7Kohm, 1/8W, 5%	R885, 886
CARBON FILM RESISTOR	PC	2	1Kohm, 1/8W, 5%	R887, 888, 889, 890
CARBON FILM RESISTOR	PC	4	470ohm, 1/8W, 5%	R891, 892
CARBON FILM RESISTOR	PC	2	22Kohm, 1/8W, 5%	R893, 894
CARBON FILM RESISTOR	PC	2	4.7Kohm, 1/8W, 5%	R895
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R896, 897, 898, 899, 900
CARBON FILM RESISTOR	PC	5	1Kohm, 1/8W, 5%	

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
CARBON FILM RESISTOR	PC	1	5.6Kohm, 1/8W, 5%	R901
CARBON FILM RESISTOR	PC	1	24Kohm, 1/8W, 5%	R902
CARBON FILM RESISTOR	PC	1	91Kohm, 1/8W, 5%	R903
CARBON FILM RESISTOR	PC	1	820Kohm, 1/8W, 5%	R904
CARBON FILM RESISTOR	PC	1	82Kohm, 1/8W, 5%	R905
CARBON FILM RESISTOR	PC	1	2.2Kohm, 1/8W, 5%	R906
CARBON FILM RESISTOR	PC	1	3.3Kohm, 1/8W, 5%	R907
CARBON FILM RESISTOR	PC	1	4.7Kohm, 1/8W, 5%	R908
CARBON FILM RESISTOR	PC	1	560ohm, 1/8W, 5%	R909
CARBON FILM RESISTOR	PC	1	4.7Kohm, 1/8W, 5%	R910
CARBON FILM RESISTOR	PC	1	2.2Kohm, 1/8W, 5%	R911
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R912
CARBON FILM RESISTOR	PC	2	100Kohm, 1/8W, 5%	R913, 914
CARBON FILM RESISTOR	PC	1	2.2Kohm, 1/8W, 5%	R915
CARBON FILM RESISTOR	PC	1	220ohm, 1/8W, 5%	R917
CARBON FILM RESISTOR	PC	1	1Kohm, 1/8W, 5%	R919
CARBON FILM RESISTOR	PC	1	100Kohm, 1/8W, 5%	R921
CARBON FILM RESISTOR	PC	1	75Kohm, 1/8W, 5%	R922
CARBON FILM RESISTOR	PC	1	220Kohm, 1/8W, 5%	R923
CARBON FILM RESISTOR	PC	1	1Kohm, 1/8W, 5%	R926
CARBON FILM RESISTOR	PC	1	270ohm, 1/8W, 5%	R927
CARBON FILM RESISTOR	PC	1	4.7Kohm, 1/8W, 5%	R928
CARBON FILM RESISTOR	PC	1	330Kohm, 1/8W, 5%	R929
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R930
CARBON FILM RESISTOR	PC	1	330Kohm, 1/8W, 5%	R931
CARBON FILM RESISTOR	PC	1	100Kohm, 1/8W, 5%	R932
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R933
CARBON FILM RESISTOR	PC	2	1Kohm, 1/8W, 5%	R935, 936
CARBON FILM RESISTOR	PC	1	390ohm, 1/8W, 5%	R937
CARBON FILM RESISTOR	PC	1	4.7Kohm, 1/8W, 5%	R938
CARBON FILM RESISTOR	PC	2	22Kohm, 1/8W, 5%	R939, 940
CARBON FILM RESISTOR	PC	1	1.5Kohm, 1/8W, 5%	R941
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R942
CARBON FILM RESISTOR	PC	1	150Kohm, 1/8W, 5%	R943
CARBON FILM RESISTOR	PC	2	100Kohm, 1/8W, 5%	R944, 945
CARBON FILM RESISTOR	PC	1	47Kohm, 1/8W, 5%	R946
CARBON FILM RESISTOR	PC	1	33Kohm, 1/4W, 5%	R947
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R948
CARBON FILM RESISTOR	PC	1	270Kohm, 1/8W, 5%	R949
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R950
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R952
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R953
CARBON FILM RESISTOR	PC	1	560ohm, 1/8W, 5%	R954
CARBON FILM RESISTOR	PC	1	15Kohm, 1/8W, 5%	R955
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R956
CARBON FILM RESISTOR	PC	1	220Kohm, 1/8W, 5%	R957
CARBON FILM RESISTOR	PC	1	4.7ohm, 1/8W, 5%	R958
CARBON FILM RESISTOR	PC	1	2.2ohm, 1/8W, 5%	R959
CARBON FILM RESISTOR	PC	1	27Kohm, 1/8W, 5%	R960
CARBON FILM RESISTOR	PC	1	15Kohm, 1/8W, 5%	R961
CARBON FILM RESISTOR	PC	1	270Kohm, 1/8W, 5%	R962
CARBON FILM RESISTOR	PC	1	4.7ohm, 1/8W, 5%	R963
CARBON FILM RESISTOR	PC	1	2.2ohm, 1/8W, 5%	R964
CARBON FILM RESISTOR	PC	2	10Kohm, 1/8W, 5%	R965, 966

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
CARBON FILM RESISTOR	PC	1	100Kohm, 1/8W, 5%	R967
CARBON FILM RESISTOR	PC	1	560Kohm, 1/8W, 5%	R968
CARBON FILM RESISTOR	PC	1	56Kohm, 1/8W, 5%	R969
CARBON FILM RESISTOR	PC	1	100Kohm, 1/8W, 5%	R970
CARBON FILM RESISTOR	PC	1	560Kohm, 1/8W, 5%	R971
CARBON FILM RESISTOR	PC	1	47Kohm, 1/8W, 5%	R972
CARBON FILM RESISTOR	PC	1	1Kohm, 1/8W, 5%	R973
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R974
CARBON FILM RESISTOR	PC	1	2.2ohm, 1/8W, 5%	R975
CARBON FILM RESISTOR	PC	1	4.7ohm, 1/8W, 5%	R976
CARBON FILM RESISTOR	PC	1	2.2ohm, 1/8W, 5%	R977
CARBON FILM RESISTOR	PC	1	1Mohm, 1/8W, 5%	R978
CARBON FILM RESISTOR	PC	1	2.2ohm, 1/8W, 5%	R979
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R980
CARBON FILM RESISTOR	PC	1	22Kohm, 1/8W, 5%	R982
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R983
CARBON FILM RESISTOR	PC	1	3.3Kohm, 1/8W, 5%	R984
CARBON FILM RESISTOR	PC	1	2.2Kohm, 1/8W, 5%	R985
CARBON FILM RESISTOR	PC	1	18Kohm, 1/8W, 5%	R986
CARBON FILM RESISTOR	PC	1	10Kohm, 1/8W, 5%	R987
CARBON FILM RESISTOR	PC	1	1Kohm, 1/8W, 5%	R988
CARBON FILM RESISTOR	PC	1	18Kohm, 1/8W, 5%	R989
CARBON FILM RESISTOR	PC	1	4.7ohm, 1/8W, 5%	R990
CARBON FILM RESISTOR	PC	2	39Kohm, 1/8W, 5%	R991, 992
CARBON FILM RESISTOR	PC	2	47Kohm, 1/8W, 5%	R993, 994
CARBON FILM RESISTOR	PC	1	4.7ohm, 1/8W, 5%	R996
NETWORK RESISTOR	PC	1	RA 1P 0613J	RA830
SEMIVARIABLE RESISTOR	PC	1	SVR-06T3B (104)	SVR901
SEMIVARIABLE RESISTOR	PC	1	SVR-06T3B (103)	SVR921, 933
SEMIVARIABLE RESISTOR	PC	2	SVR-06T3B (503)	SVR923
SEMIVARIABLE RESISTOR	PC	1	SVR-06T3B (103)	L901
FILTER BLOCK	PC	1	184029	L941
OSC. COIL	PC	1	ARO-029	XL941
CRYSTAL	PC	1	8.6436 MHz	
JUMPER WIRE	PC	1	0.06 x 172	
LED DISPLAY	PC	1	LN524 RAS	
CERAMIC AC CAPACITOR	PC	1	4700pF, AC 400V	
TACT SWITCH	PC	1	DTI-1D	
D.I.W	PC	1	WHITE	
D.I.W	PC	1	BLACK	
D.I.W	PC	1	BLUE	
INSULATION TUBE	PC	1	10ø	
INSULATION TUBE	PC	1	3.264ø	
VINYL TUBE	PC	1	1.0ø	
WRAPING PIN	PC	1	1 x 1 x 16 mm	
PCB MAIN	PC	1	230 x 160 x 1.6t	
PCB DISPLAY	PC	1	197 x 108 x 0.6t	
POWER SWITCH	PC	1	4.0ø T1P, CP2 1.8m	
AC CORD W/PLUG BAND	PC	1	220V, 50 Hz	
POWER TRANSFORMER	PC	1		

PART LIST ELECTRICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
STRAIN RELIEF	PC	1	5ø, SR-5N-4	
LED DISPLAY	PC	2	LB-402VA	
CD MECHANISM	PC	1	TCD-104B	
INSTALLATION SCREW	PC	1	A81H 004	
D-CUSHION	PC	1	A81G103	
LASER PICK-UP	pc	1	D-55	
RCA JACK	PC	1	2P RCA, PCB TYPE	
HEADPHONE JACK	PC	1	HTJ 064-03D1	
VOLUME W/NUT, WASHER	PC	1	100KB x 2, 16ø, S = 20 mm	
RCA CORD	PC	1	2P RCA, 60 mm	
LEAD WIRE	PC	1	AWG #26, 7/0.16, 1.5ø	
LEAD WIRE	PC	1	5P, L = 300 mm, 1429, AWG #26, W/PHR-5	
LEAD WIRE	PC	1	6P, L = 340 mm, 460 mm, 1429, AWG #26, W/PHR-6	
LEAD WIRE	PC	1	6P, L = 250 mm, 1429, AWG #26, W/PHR-6 x 2	
LEAD WIRE	PC	1	8P, L = 250 mm, 2851, AWG #28 (4P SHIELD), W/PHR-8 x 2	
HIGH WRAP CABLE	PC	1	6P, L = 120 mm	
HIGH WRAP CABLE	PC	1	10P, L = 120 mm, W/10P HOUSING	
HIGH WRAP CABLE	PC	1	5P, L = 120 mm, W/5P HOUSING	
HIGH WRAP CABLE	PC	1	4P, L = 120 mm, W/4P HOUSING	
HIGH WRAP CABLE	PC	1	3P, L = 80 mm, W/3P HOUSING x 2	
HIGH WRAP CABLE	PC	1	6P, L = 250 mm (3P), 350 mm (3P), W/3P HOUSING	
HIGH WRAP CABLE	PC	1	4P, L = 170 mm W/5P HOUSING	
WAFER	PC	1	10P	
WAFER	PC	1	5P	
WAFER	PC	1	4P	
WAFER	PC	1	3P	
PH CONNECTOR BASE	PC	1	5P	
PH CONNECTOR BASE	PC	1	6P	
PH CONNECTOR BASE	PC	1	8P	
ANGLE WAFER	PC	1	4P	
HIGH WRAP CABLE	PC	1	4P, L = 600 mm, W/4P HOUSING x 2	

PART LIST MECHANICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
PANEL MOLD	PC	1	A1M-0049	
TACT S/W KNOB (A)	PC	1	A3MF-0113	
TACT S/W KNOB (B)	PC	1	A4MF-0312	
TACT S/W KNOB (C)	PC	1	A4MF-0313	
CD DOOR	PC	1	A3MF-0102	
POWER KNOB	PC	1	A4MF-0198	
PCB SUPPORT	PC	1	A4MG-0289-03	
PCB SUPPORT DASS 6N	PC	1	A4MG-0342	
WINDOW	PC	1	A3MF-0103	
DISPLAY FILTER	PC	2	A4MF-0307	
JOINT POWER SW	PC	1	A4MG-0304	
KNOB CONNECTOR	PC	1	A4MG-0306	
RUBBER CUSHION	PC	1	A4MG-0311	
KNOB REC MIC	PC	1	A4MF-0206	
FOOT (CUSHION)	PC	2	A4MG-0339	
BOTTOM CHASSIS	PC	1	A1M-0042	
TOP COVER	PC	1	A1M-0048	
CD BRACKET (F)	PC	1	A3MF-0116	
CD BRACKET (B)	PC	1	A4MC-0429	
POWER S/W BRACKET	PC	1	A4MC-0421	
PCB BRACKET (A)	PC	2	A4MC-0448	
PCB BRACKET (C)	PC	1	A4MC-0453	
GROUND TERMINAL	PC	1	A4MC-0428	
JOINT	PC	1	A4MC-0447	
V/R BRACKET	PC	1	A4MC-0450	
HEAT SINK	PC	1	4PC 1400-02	
LUG WASHER	PC	2	4PC 0412-B1	
WIRE BAND	PC	1	4PC 0002B	
PLAIN WASHER	PC	3 (5)	ø9.9 x 3.3 x 0.5t	
FIBER	PC	1	A4MG-0354-01	
STYRO FOAM	PC	2	A1M-0057	
GIFT BOX	PC	1	4PP 0578	
POLY BAG (S)	PC	1	700 x 400 x 0.05t	
POLY BAG (I)	PC	1	4PP-0186-01	
OPP TAPE	m	0.6	W:50 mm	
SILICAGEL	PC	1	5 Gr	
INSTRUCTION MANUAL	PC	1	A4MG-0140	
CHECK SHEET	PC	1	A4MG-0138	
WARRANTY CARD	PC	1	A4MG-0137	
FUSE LABEL	PC	2	A4MG-0143	
BOTTOM STICKER	PC	3	A4MG-0175	
COLOR LABEL	PC	2	4Pp 0682	
CUSHION (P)	PC	1	A4MG-0444	

PART LIST
MECHANICAL PARTS

PARTS NAME	UNIT	Q'TY	DESCRIPTION	REMARKS
TAPPING SCREW	PC	6	BH T2T \emptyset 3x 6 Fe-Zy	
TAPPING SCREW	PC	11	BH T2T \emptyset ex 6 Fe-ZB	
TAPPING SCREW	PC	4	FH T2T \emptyset 3x 8 Fe-ZB	
TAPPING SCREW	PC	2	BH T2T \emptyset 3x 8 Fe-ZB	
TAPPING SCREW	PC	2	BH T2T \emptyset 3x 10 Fe-Zy	
MACHINE SCREW	PC	3	BH M3x 8 Fe-Zy	
MACHINE SCREW	PC	2	BH M3x 8 Fe-ZB	
MACHINE SCREW	PC	2	BH M4x 8 Fe-ZB	
NUT	PC	2	HEX M4x 0.7 Fe-Zy	
# 575 BOND	Gr	0.5		
VINYL WASHER	PC	1	\emptyset 9.9x 3.3x 0.5t	
FOOT (G.H.S)	PC	2	A4MG-0338-04	
FOOT (RUBBER)	PC	2	H: 13	
FOOT CUSHION	PC	2		
CHASSIS BACK	PC	1	A2MC-0156	
PLAIN WASHER	PC	3	\emptyset 9.9x 3.3x 0.5t	
FIBER AC BLOCK	PC	1	NON-UL	
WARRANTY CARD	PC	1		
AS GUIDENCE	PC	0		
INSPECTION LABEL	PC	0		
FUSE LABEL	PC	0		
POLY BAG (F)	PC	0		
SCREW TAPPING	PC	22	BH T2T \emptyset 3x 8 Fe-Zy	
SCREW TAPPING	PC	2	BH T2T \emptyset 3x 12 Fe-Zy	
SCREW TAPPING	PC	1	BH T2T \emptyset 3x 14 Fe-Zy	
SCREW MACHINE	PC	0	BH M3x 8 Fe-ZB	
BRKT REMOTE	PC	1		
PCB SUPPORT	PC	3		